

Serial No. 09/596,101

**IN THE CLAIMS:**

1. (Currently amended) A An isolated peptide comprising at least 9 contiguous amino acids of SEQ.ID.NO.1 SEQ ID NO: 1.
2. (Currently amended) A An isolated peptide comprising the amino acid sequence of SEQ.ID.NO.3 SEQ ID NO: 3 or a functional fragment thereof having trypanolytic activity.
3. (Currently amended) The isolated peptide of claim 1 exhibiting trypanolytic activity.
4. (Withdrawn) An antibody specifically recognizing a peptide selected from the group consisting of a peptide comprising at least 9 contiguous amino acids of SEQ.ID.NO.1, a peptide comprising the amino acid sequence of SEQ.ID.NO.3, a fragment of either thereof, and an epitope of either thereof.
5. (Withdrawn) A DNA sequence encoding an Eisenia foetida protein or polypeptide or encoding an immunologically active and/or functional fragment thereof selected from the group consisting of:
  - (a) DNA sequences comprising a nucleotide sequence encoding a protein or peptide comprising the amino acid sequence as given in SEQ ID NO. 1 or 3;
  - (b) DNA sequences comprising a nucleotide sequence as given in SEQ ID NO: 2;
  - (c) DNA sequences hybridizing with the complementary strand of a DNA sequence as defined in (a) or (b) and encoding an amino acid sequence which is at least 80% identical to the amino acid sequence encoded by the DNA sequence of (a) or (b);
  - (d) DNA sequences the nucleotide sequence of which is degenerated as a result of the genetic code to a nucleotide sequence of a DNA sequence as defined in any one of (a) to (c); and

Serial No. 09/596,101

(e) DNA sequences encoding a fragment of a protein encoded by a DNA sequence of any one of (a) to (d).

6. (Withdrawn) A recombinant expression vector comprising the DNA sequence of claim 5.

7. (Withdrawn) A host cell transformed or transfected with an expression vector according to claim 6.

8. (Withdrawn) The host cell of claim 7 wherein the host cell is selected from the group consisting of *E. coli*, *Bacillus sp.*, *Streptomyces sp.*, yeast, fungi, insect cells, plant cells and mammalian cells.

9. (Withdrawn) The host cell of claim 8, wherein the host cell is *E. coli*.

10. (Withdrawn) A process for the production of an *Eisenia foetida* polypeptide or an immunologically active or functional fragment thereof comprising culturing a host cell of claim 7 under conditions allowing the expression and production of said polypeptide and recovering the thus produced polypeptide from the culture.

11. (Currently amended) A pharmaceutical composition comprising at least a an isolated peptide selected from the group of peptides consisting of a peptide comprising at least 9 contiguous amino acids of SEQ ID NO:1 SEQ ID NO: 1, a peptide comprising the amino acid sequence of SEQ ID NO:3 SEQ ID NO: 3, a fragment of either thereof having trypanolytic activity, and an epitope of either thereof.

Serial No. 09/596,101

12. (Withdrawn) A method of treating a disease selected from the group of diseases consisting of trypanosomal infection, bacterial infection and cancer, said method comprising:

administering a peptide selected from the group of peptides consisting of a peptide comprising at least 9 contiguous amino acids of SEQ.ID.NO.1, a peptide comprising the amino acid sequence of SEQ.ID.NO.3, a fragment of either thereof, and an epitope of either thereof.

13. (Currently amended) The isolated peptide of claim 2 exhibiting trypanolytic activity.

14. (Withdrawn) The process according to claim 10, wherein the host cell is selected from the group consisting of *E. coli*, *Bacillus sp.*, *Streptomyces sp.*, yeast, fungi, insect cells, plant cells, and mammalian cells.

15. (Withdrawn) The process according to claim 14, wherein the host cell is *E. coli*.

16. (Currently amended) The pharmaceutical composition of claim 11, wherein the peptide comprises at least 9 contiguous amino acids of SEQ.ID.NO.1 SEQ ID NO: 1, a fragment thereof having trypanolytic activity, or an epitope thereof.

17. (Currently amended) The pharmaceutical composition of claim 11, wherein the peptide comprises the amino acid sequence of SEQ.ID.NO.3 SEQ ID NO: 3, a fragment thereof having trypanolytic activity, or an epitope thereof.

18. (Withdrawn) The method according to claim 12 wherein the peptide comprises at least 9 contiguous amino acids of SEQ.ID.NO.1 a fragment thereof, or an epitope thereof.

19. (Withdrawn) The method according to claim 12 wherein the peptide comprises the amino acid sequence of SEQ.ID.NO.3, a fragment thereof, or an epitope thereof.

Serial No. 09/596,101

Please add the following new claim:

20. (New) An isolated peptide consisting of a sequence selected from the group of sequences consisting of SEQ ID NO: 1, at least 9 contiguous amino acids of SEQ ID NO: 1, SEQ ID NO: 3 and a fragment of SEQ ID NO: 3 having trypanolytic activity.